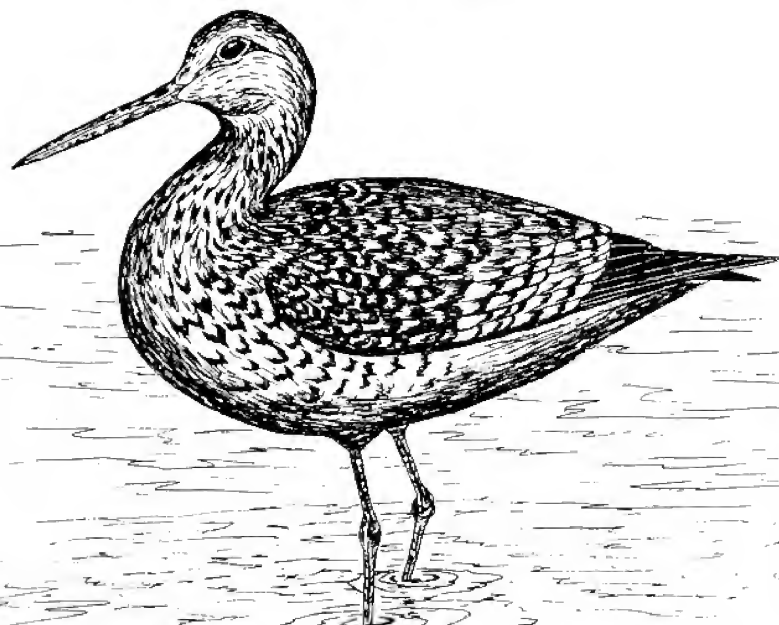


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Identifying Meadowlarks in Iowa

83

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Though identifying a bird as a meadowlark is easy, determining if the bird is an Eastern (*Sturnella magna*) or Western Meadowlark (*S. neglecta*) can be a problem. Call notes and song are by far the best field marks, but certain range, habitat, and plumage characteristics can also be useful. The purpose of this paper is to present the characteristics useful for identifying the two species.

A word of caution: Two poorly differentiated Eastern Meadowlark races, *S. m. magna* and *S. m. argutula*, are discussed here. The southwestern race, *S. m. lillanae*, differs from both Westerns and other Easterns and, indeed, might be a separate species from either (Rowher, 1976). It is not covered here.

For this study, I read field guides and other publications and examined the meadowlark collections from University of Nebraska at Omaha, University of Nebraska at Lincoln, Wayne State University, and the Field Museum at Chicago. I used the ratio of wing chord to tarsus length to identify birds of questionable appearance (Table 1). No one measurement will separate Eastern from Western Meadowlarks, but Westerns have relatively longer wings (Lanyon, 1967). Meadowlark tail patterns were classified in six categories, as described under "tail pattern" below.

In addition, the results of the U.S. Fish and Wildlife Service's Breeding Bird Surveys were examined to determine the breeding distribution of meadowlarks in Iowa.

Table 1. Wingchord-tarsus length ratio in meadowlarks (Lanyon, 1967).

Species	Sex	
	Male	Female
Western	3.17 + .017	3.06 + .016
Eastern	2.88 + .013	2.80 + .013

Range and Habitat Preference

Range — The Eastern Meadowlark is found from southeastern Canada through the eastern United States and Mexico south to Peru. The Western Meadowlark has a more limited range from southwestern Canada throughout the western United States. Unfortunately, the ranges of the two species overlap extensively in the midwest, with the Eastern breeding regularly at least into Cherry County, Nebraska, and the Western breeding rarely as far east as New York State.

Using Breeding Bird Surveys to define the range of meadowlarks in Iowa is complicated by apparent observer error on the surveys. For example, on one Iowa route Eastern Meadowlarks averaged 11 percent of all reported meadowlarks from 1967 through 1970, 92 percent from 1971 through 1975, and 3 percent from 1976 through 1980. Those results are exceedingly unlikely to be true. Breeding Bird Survey routes 3, 4, 5, 10, and 16 were omitted from analysis because of such problems.

The information that remains suggests that breeding Eastern Meadowlarks are concentrated in the southeast corner of the state. In the southern two tiers of counties at least as far west as Lucas County, over 90 percent of meadowlarks reported on the surveys are Easterns. The proportion of Eastern Meadowlarks falls off rapidly toward the north and west. A significant minority (about 12-40 percent) of the meadowlarks in counties near the Mississippi River are Easterns, but over much of the state Easterns amount to 5 percent or less of the total meadowlark population. None are reported from the far northwest.

Both meadowlarks move south for the winter. It should be noted that any tendency for Easterns to move south will leave most of the state with Westerns as the only wintering meadowlarks.

Habitat — Within this range, the two meadowlarks differ in habitat preference. Rowher (1976) reported that in the Great Plains Eastern Meadowlarks prefer river floodplains while Westerns prefer the more arid uplands. This seems to be true in Iowa (pers. obs.; Kent, 1983). Westerns seem to be the more common species in grassy roadsides (Silcock, 1983).

Voice

Call note — The Western Meadowlark's most common call is "Bic!" while the Eastern gives a buzzy "Dkert!". It is probable that these call notes are inherited. They are consistent and reliable field marks.

If a bird is silent, slowly walking or driving toward it will often cause it to call.

Song — Westerns usually give a long, warbling song, very different from the shorter, sad, descending whistle of the Eastern. However, the birds learn their songs. Since they usually learn from their fathers, song is usually an accurate field mark, but some birds learn the wrong song, and a few are "bilingual", singing both songs.

Though one may make a mistake identifying meadowlarks by song, I recommend using song wherever possible because 1) the probability of error is really quite low, 2) song is the only characteristic useful for distant birds, and 3) song is more consistently accurate than any other field mark except call note. Of course, if there is reason to believe a bird is singing the wrong song — if it is the only "Western" in a field of Easterns, for example — examine it closely.

Appearance

Meadowlarks identify one another to species by voice, not appearance, and humans should do likewise. Nonetheless, it is tempting to try to identify silent birds, and some clues are presented below. Keep in mind that even the experts must collect meadowlarks if correct species identification is really critical.

Molt and feather wear — The subtle differences used to differentiate the two species are strongly influenced by feather wear. Meadowlarks molt once a year, in August and September. In October the plumage is fresh, but it becomes worn as the year progresses. Though the rate of wear varies from one bird to the next, all the June birds I examined were heavily worn. As feathers wear down, the tips and edges are broken off. Pale areas wear much faster than dark ones, causing worn birds to appear dark.

Back color — The color of the back and crown is the most reliable plumage characteristic for identifying meadowlarks (Lanyon, 1967), though it is difficult to use this clue in the field where lighting and background affect the appearance of what is only a comparative difference. Back color is useful mainly in winter, when the birds are in fresh plumage, and when they can be compared directly with one another.

In fresh plumage (that is, in fall and winter), the back feathers are black in both species, broadly tipped with tan (in Westerns) or brown (in Easterns). Both species have pale edges on the sides of the feathers, but the tan tips in Westerns impart a pale appearance to the back, while the Easterns appear darker. Therefore, in winter, pale-backed birds are Westerns and dark-backed birds are Easterns. By April, however, some Westerns may show much wear, losing the tan tips to the back feathers and exposing the underlying black coloration, and can thus appear moderately dark. Thus both species appear dark-backed in summer, and back color is useless for identifying them at that time.

Juvenile meadowlarks have large pale edges to the back feathers (tan in Westerns, orange-buff or rarely tan in Easterns). Therefore, a pale-backed meadowlark in summer is young and not necessarily Western.

Cheek color — Some field guides point out that Western Meadowlarks have yellow cheeks while Easterns do not. This is well illustrated in Peterson (1980). While this is true, it is a tricky characteristic to see in the field. The "cheek" as used here means the area below the brown feathers on the face and above the apterium (featherless area) at the edge of the throat. In the field the apterium is invisible and it is difficult to determine where the lower edge of the cheek really is. Another problem is that male Easterns and female Westerns overlap slightly in the amount of yellow on the cheek (Table 2). More significantly, birds of either species may or may not have tan or buff tips on the cheek and throat feathers in fresh plumage. These pale tips cover any yellow that may be present; on the other hand, the buffier tips may be mistaken for yellow. If present, these tan or buff feather tips wear off in spring, but some birds still have them in late April.

To summarize, birds with extensive yellow (not buff) in the cheek can be identified as Westerns at any time of year. Birds without extensive yellow in the cheek can not be identified by this field mark in winter (that is, in fresh plumage). In late spring or summer any buffy tips will have worn away, and a bird with bright yellow throat and white or gray (not buff or tan) cheek is Eastern. Some birds can never be identified by cheek color.

Table 2. Extent of yellow in the cheek of meadowlarks in worn plumage.

Species	Male	Female
Western	Much	Little or much
Eastern	Usually none; rarely little	None, and yellow of throat may not extend to edge of cheek

Lores — The amount of yellow in the lores (between eye and bill) is not useful for identifying meadowlarks.

Tail pattern — Typical meadowlark tail patterns are illustrated in Peterson (1980). Westerns usually have black bars well separated on a light brown tail. In Easterns, the bars usually merge along the shaft of the medium brown tail feathers.

I examined 257 meadowlark tails, and found that while these patterns are indeed typical of the two species, there is complete overlap in tail patterns. I classified each tail into one of six categories according to the pattern of the central tail feathers:

A — Black bars narrower than the brown areas separating them.

B — Black bars equal to or wider than the brown areas.

C — Bars as in A or B, but a very narrow black line parallels the shaft of the feather.

D — Black area where bars merge narrower than half the length of the black bars.

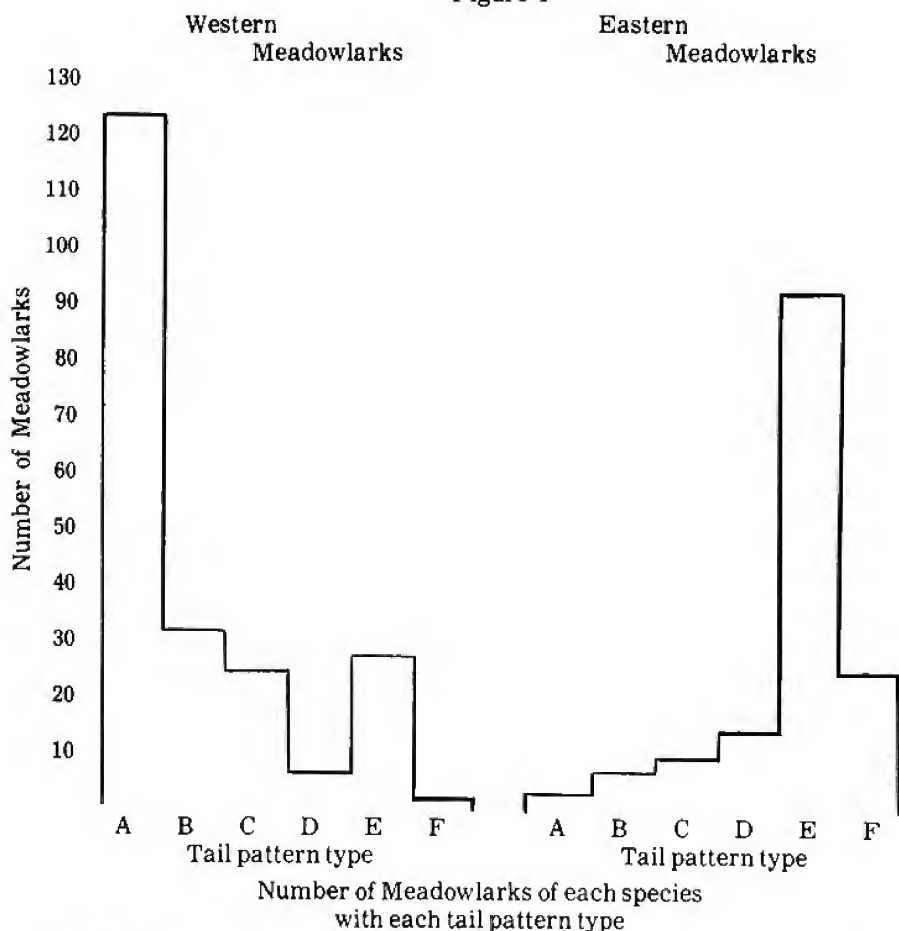
E — Black area where bars merge equal to or greater than half the length of the black bars.

F — Black area on feathers very extensive.

In addition, I noted if a tail in categories C through F had 3 or more of the distal tail bars separated, not fused along the feather shaft like the rest. See Figure 1 for results.

Birds in Categories A through C would probably be identified in the field as Westerns on the basis of tail pattern. Birds in categories D through F would probably be identified as Easterns. Of the Western tails, 16 percent fell into categories D through F. A little more than half had 3 or more isolated tail bars near the end of the tail feathers, and might be correctly identified, but nonetheless 7 percent of the total Westerns had tails that could very easily be mistaken for Easterns.

Figure 1



An analysis of the Breeding Bird Surveys suggests that only 9.8 percent of the meadowlarks breeding in the state are Easterns. In most of the state, Easterns constitute 5 percent or less of the meadowlark population. Therefore, in most of the state there are more breeding Western Meadowlarks that could be identified as Easterns by tail pattern than there are real Easterns.

Hybrid Meadowlarks

Meadowlarks rarely hybridize, so it is probably best to ignore the slight possibility that the bird one is observing might be a hybrid. Lanyon (1967) points out that female F1 hybrids resemble Easterns, while the males resemble Easterns except for the extensive yellow in their cheeks. Do not be in a hurry to call meadowlarks of this appearance hybrids; a very worn Western in late summer may be dark enough to look like an Eastern with yellow cheeks.

Summary

In Iowa, meadowlarks should be identified by call note or song whenever possible. Distribution, habitat, and appearance are useful in some cases (Table 3). Since meadowlark plumages are so variable, it is wise not to identify a bird to species by appearance unless at least two of the three critical areas (back, cheek, and tail) have the color typical of the same species.

Table 3. Summary of characteristics useful for identifying meadowlarks

Characteristic	Western	Eastern
Call note	Bic!	Dzert!
Song	Long melodius warble	Sad descending whistle
Range	Common except in SE Iowa	Uncommon except in SE Iowa; rare in NW
Habitat	Uplands	Floodplains
Back color	Paler (winger only)	Darker
Cheek color	Extensive yellow (often)	No yellow (usually) Black bars merge (usually)
Tail pattern	Black bars separated (usually)	

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A Ruff (*Philomachus pugnax*) in Southwest Iowa

A Discussion of the Patterns of Occurrence of this Species in North America

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A juvenile male Ruff was seen in Fremont County, Iowa on September 8-12, 1982, in the company of Lesser Yellowlegs and Pectoral Sandpipers. In size, it was slightly taller than the yellowlegs, with somewhat shorter, greenish legs, and it had a noticeably bulkier body, these points indicating that it was a male. The bird was strikingly buffy, especially on the upper breast and on the generally unmarked head. The feathers of the back and wings were also very buffy, and were prominently edged with grayish-white. These plumage characters are typical of a juvenile bird. The bill was similar in shape and proportions to that of a Pectoral Sandpiper, being rather stout at the base and slightly decurved; it was black. In flight the sides of the rump were a showy white, meeting in the upper tail covert area to form a V. This effect is well shown in a photograph in Roberson (1980: *Rare Birds of the West Coast*). The overall impression given by the bird when in flight was that of a large Pectoral Sandpiper.

The documentation for this sighting, with photographs, was accepted by the Records Committee of the Iowa Ornithologists' Union, and constitutes only the second record for Iowa, the first being one collected at Burlington in southeast Iowa May 10, 1940 (*Auk* 58:257).

In North America the Ruff has been traditionally considered to be a "regular fall visitor (rarely spring) from Eurasia" to both the Atlantic and Pacific coasts, straggling inland to the Great Lakes area (Robbins, 1966: *Birds of North America*; Peterson, 1982: *Birds East of the Rockies*). More recent data however is beginning to indicate a migration pattern typical of shorebird species breeding in North America. Terres (1980: *Encyclopedia of North American Birds*) states that the

Ruff is "becoming a regular spring and fall transient, especially along the Atlantic coast, from Canada to North Carolina, and also reported inland." Indicative of the numbers recorded at certain places near the Atlantic coast are the 10-12 birds reported in 1980, 10 in 1978, and 11 in 1976 in the Hudson-Delaware Region in *American Birds* (34:760). It was stated by Paxton et al (AB 34:760) that in this Region "Ruffs appear early and with remarkable regularity at traditional Delaware Valley sites, mid-March to mid-April, along with the first yellowlegs flocks." Many of these spring birds are males in breeding plumage. Along the Atlantic coast it appears that few, if any, Ruffs overwinter, even in Florida, where the species is at best accidental (Lane, 1981: *A Birder's Guide to Florida*). This situation is in contrast to that on the Pacific coast, where there is a pattern of Ruffs wintering in California between late October and early April (Roberson, 1980).

While "no birds in breeding plumage nor any that could be termed spring migrants have been found as yet" in California (Roberson, 1980), there is a peak of occurrences in September-early October, "perhaps all juveniles" (Roberson, 1980). Garrett and Dunn (1981: *Birds of Southern California*) consider the Ruff to be a casual fall transient and winter visitor along the southern California coast, with two spring records, the authors suggesting that the latter records (March 30 and April 1) may refer to locally wintering birds. Whether the birds wintering in California are juveniles or adults is not discussed by either Roberson (1980) or Garrett and Dunn (1981), but the data presented by Roberson (1980) suggest that many, if not all, are indeed juveniles. Molt into adult plumages (especially adult male breeding) would not have occurred by the time these birds leave the Pacific coast (Cramp et al, 1983: *Birds of the Western Palearctic*, Vol. 3). Further north on the Pacific coast, in Washington and Oregon, all records are in fall and mainly of juveniles, ranging from August to October, thus fitting the pattern of migrating of juveniles seen in California. Significantly, however, in British Columbia the records are primarily in the period late June to early August, indicating that these birds are adults, rather than juveniles (Roberson, 1980).

In light of the apparently differing patterns of occurrence on the Atlantic and Pacific coasts, it is of interest to examine the available records from the upper midwest, specifically those from Iowa and the states contiguous with Iowa. In these states, there are some 50 records of Ruff (see appendix). Of these, about 40 are from Minnesota, Wisconsin, and Illinois, and only about nine from North Dakota, Kansas, Iowa, and Missouri, with none from South Dakota or Nebraska. These records are shown graphically in Figure 1, and indicate a pattern of spring migration from April to early June (including several records of males in breeding plumage), followed by a significant early fall movement (late June to July) suggestive of post-breeding adults, and a later fall movement (mid-August to late October) presumably of juveniles. This pattern closely resembles that seen on the Atlantic coast, as it involves both spring and fall migration, presence of males in breeding plumage in spring, and has no wintering population, all three points being in contrast to the situation on the lower Pacific coast.

The concentration of records in the northeasternmost three states of the group of states surrounding Iowa (Minnesota, Wisconsin, and Illinois) may be due to birder concentration, but seems more likely to be a reflection of the probability that significant migration of Ruffs occurs as far west as the Great Lakes region. It is interesting that while this concentration of records is from the three Great Lakes states nearest Iowa, most of the records are in fact from parts of those states away from the Lakes themselves, indicating that migration in the Great Lakes area is part of a broad-front movement which includes the eastern United States rather than being related to the Great Lakes themselves.

The migration pattern suggested by the records from the interior and the

Atlantic coast is strongly indicative of a breeding population in North America. To date, breeding in North America has only been proven in Alaska, and even there on only very few occasions (Roberson, 1980), but the number of records of Ruff in recent years indicates that breeding may be far more extensive than is currently assumed. The information discussed above from the Pacific and Atlantic coasts and from the upper midwest indicates that migration of Ruff in North America takes place in a southeastward direction from northern Canada in fall, including the Great Lakes region and points further east, arriving at the Atlantic coast between southeast Canada and North Carolina, from whence the birds fly to South America across the western Atlantic. This pattern closely resembles that of both species of yellowlegs (Cramp et al, 1983). In more detail, this migration pattern may be developed as follows. In fall, adults migrate during the period late June to August from Arctic breeding sites primarily in a southeastward direction, across the Great Lakes area, arriving at the Atlantic coast mainly within the United States, but north of North Carolina, and then on to South America. The few records of Ruffs from British Columbia and the upper midwest during this period in summer presumably represent the southernmost extent of this southeastward migration pathway, the significant increase in the number of records in Minnesota, Wisconsin, and Illinois indicating the location of the nearest point to Iowa of the migration pathway used by significant numbers of Ruffs. Juveniles appear to follow the same route in fall at a somewhat later time, mainly during mid-August through late October, with the exception of a few that seem to straggle south along the Pacific coast and over winter in California. In spring, most birds appear to move north primarily on the Atlantic coast, but also in the interior, as there are no spring records from the Pacific coast. These birds will have returned from wintering areas in South America presumably by non-stop flight, as there are very few Caribbean records (Ridgely, 1981: *Birds of Panama*; Norton, 1981: AB35:232). It is significant in this respect that only two species of shorebirds migrate in spring directly without stopping from northern South America to the United States (rather than through the Caribbean islands or via Central America), these being Greater Yellowlegs and Short-billed Dowitcher (Cramp et al, 1983), both species being favored companions of Ruffs. It seems likely that Ruff indeed winters in South America because its favored congeners, the yellowlegs, do so, and because this distribution pattern resembles that seen in the Old World, where Ruff winters primarily in Africa, while breeding in arctic Asia. Significantly, Norton (AB 35:232) mentions "recent records from Peru", and also cites a January 28, 1972 record from Puerto Rico, indicating that a few birds might winter in the Caribbean basin rather than in South America. That Ruffs winter in southern California and rarely in the Caribbean area is analogous to the situation in the Old World, as shown by Cramp et al (1983), whereby there are isolated wintering areas in coastal Europe, rather far north of the usual wintering grounds in Africa.

Appendix: records of Ruff from Iowa and contiguous states

Iowa:

May 10, 1940	Auk 58:257
Sept 8-12, 1982 (juv male)	AB 37:187

North Dakota:

May 1-9, 1978 (brdg male)	AB 32:1023
May 8-10, 1979 (male, prob female)	AB 33:783
July 7, 1982 (brdg male)	AB 36:991

South Dakota:

no records

Nebraska:

no records

Kansas:

June 22, 1982

AB 36:992

Missouri:

Apr 17, 1982

AB 36:858

Aug 26, 1972

AB 27:68

Aug 28, 1974

AB 29:66

Minnesota:

Apr 26-May 2, 1971

Green and Janssen, 1975:

Minnesota Birds

May 9, 1982 (brdg male; female)

AB 36:855

May 11, 1975

AB 29:856

May 13, 1973

Green and Janssen

May 23-30, 1964

Green and Janssen

June 8, 1977

AB 31:1144

July 9, 1979 (male)

AB 33:865

July 22, 1978

AB 32:1163

Aug 18, 1979

AB 34:164

Sept 12, 1976 (2)

AB 31:181

Oct 2, 1976

AB 31:181

Wisconsin:

May 7, 1982 (winter male)

AB 36:855

May 10-11, 1982 (partial brdg male)

AB 36:855

May 14, 1977 (brdg male)

AB 31:1004

May 14-16, 1981 (subad male)

AB 35:876

May 15-19, 1980 (female)

AB 34:779

Aug 14, 1976

AB 31:181

Oct 30, 1982 (4)

AB 37:183

Illinois:

Apr 6, 1980

AB 34:782

Apr 10, 1982 (male)

AB 36:858

Apr 18-19, 1981

AB 35:830

Apr 20, 1980

AB 34:782

Apr 23-May 3, 1982 (female)

AB 36:858

Apr 26, 1969 (male)

Bohlen, 1978: **Birds of Illinois**

May 3, 1969 (brdg male)

Bohlen

May 5-6, 1979

AB 34:169

May 8-9, 1981

AB 35:830

May 9, 1973 (brdg male)

Bohlen

May 9, 1980

AB 34:782

June 29, 1976 (male)

Bohlen

July 3, 1962 (male)

Bohlen

July 4-5, 1959 (brdg male)

Bohlen

July 5, 1980

AB 34:900

July 16-19, 1978 (changing plge)

AB 32:1169

July 18, 1971 (brdg male)

Bohlen

July 21-22, 1964 (male)

Bohlen

July 28-Aug 4, 1978

AB 33:183

Aug 13, 1978

AB 33:183

Sept 2, 1979

AB 34:168

Sept 15-20, 1976 (male)

Bohlen

TV Tower Kill in Central Iowa

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In the past several decades, there have been numerous studies documenting bird kills at TV towers, including large kills in Illinois (Brewer and Ellis 1958), Missouri (Eler and Hansen 1967), Wisconsin (Kemper et al. 1966), and Minnesota (Kemper et al. 1966). To date, the only documentation of such kills in Iowa that we are aware of is the listing of birds killed at the Alleman TV tower near Alleman in fall 1973 and spring and fall 1974 (Mosman 1975).

On the morning of 14 September 1982, Dinsmore received word that there had been a sizeable kill at the Alleman tower the previous night. From 1 to 3 p.m. we collected carcasses of birds from the base of that tower and a second tower about ¼ mile to the west. The Alleman towers consist of two 2,000 foot towers, about 1 mile south of Alleman in Polk County. Of the 384 birds we collected, 365 were from the east tower and only 19 from the west tower. At both towers, we only searched the open area directly under the tower and extending out for a radius of about 50 yards and also on cleared areas under the guy wires to the north and southwest. The triple sets of guy wires extend out for at least several hundred yards beyond that, but much of that land was in crops, mainly soybeans and was too dense for us to search in a meaningful way. Most birds were found under the tower, the guy wires, or to the south of them, suggesting that the bird's momentum had carried them downflight after they struck the tower or wires. This arrangement of carcasses around the tower is similar to the pattern noted by Brewer and Ellis (1958). Most of the birds were dead but there were a number of injured or stunned birds. We have not included those that were still alive (about a dozen) but they seemed to be representative of the species that were found dead and thus their exclusion should not affect any conclusions we draw here.

The 384 birds represent 33 species plus one unidentified *Empidonax* flycatcher (Table 1). The best represented groups were the warblers (17 species, 141 individuals), vireos (3 species, 135 individuals), and thrushes (4 species, 63 individuals). The kill seemed to be representative of a typical assemblage of noc-

Table 1.

Species	No. Killed
Sora (<i>Porzana carolina</i>)	3
Black-billed Cuckoo (<i>Coccyzus erythrophthalmus</i>)	1
Yellow-bellied Flycatcher (<i>Empidonax flaviventris</i>)	1
<i>Empidonax</i> sp.	1
Veery (<i>Catharus fuscescens</i>)	24
Gray-cheeked Thrush (<i>Catharus minimus</i>)	4
Swainson's Thrush (<i>Catharus ustulatus</i>)	33
Wood Thrush (<i>Hylocichla mustelina</i>)	2
Gray Catbird (<i>Dumetella carolinensis</i>)	19
Warbling Vireo (<i>Vireo gilvus</i>)	1
Philadelphia Vireo (<i>Vireo philadelphicus</i>)	1
Red-eyed Vireo (<i>Vireo olivaceus</i>)	133
Tennessee Warbler (<i>Vermivora peregrina</i>)	15
Nashville Warbler (<i>Vermivora ruficapilla</i>)	5
Yellow Warbler (<i>Dendroica petechia</i>)	3
Chestnut-sided Warbler (<i>Dendroica pensylvanica</i>)	7

Black-throated Blue Warbler (<i>Dendroica caerulescens</i>)	2
Black-throated Green Warbler (<i>Dendroica virens</i>)	1
Blackburnian Warbler (<i>Dendroica fusca</i>)	1
Bay-breasted Warbler (<i>Dendroica castanea</i>)	13
Black-and-white Warbler (<i>Mniotilta varia</i>)	20
American Redstart (<i>Setophaga ruticilla</i>)	2
Ovenbird (<i>Seiurus aurocapillus</i>)	32
Northern Waterthrush (<i>Seiurus noveboracensis</i>)	18
Connecticut Warbler (<i>Oporornis agilis</i>)	1
Mourning Warbler (<i>Oporornis philadelphia</i>)	6
Common Yellowthroat (<i>Geothlypis trichas</i>)	10
Wilson's Warbler (<i>Wilsonia pusilla</i>)	3
Canada Warbler (<i>Wilsonia canadensis</i>)	2
Scarlet Tanager (<i>Piranga olivacea</i>)	1
Rose-breasted Grosbeak (<i>Pheucticus ludovicianus</i>)	11
Lincoln's Sparrow (<i>Melospiza lincolni</i>)	1
Bobolink (<i>Dolichonyx oryzivorus</i>)	2
Northern Oriole (<i>Icterus galbula</i>)	5
Total 33 species plus one unidentified <i>Empidonax</i> flycatcher	365

turnal migrants that one would expect to find in mid-Iowa in mid-September. the list of birds we found was compared with the birds killed at towers in Minnesota, Wisconsin, and at this same tower on comparable dates in 1974 (Table 2). Because the other lists have treated *Empidonax* flycatchers in different ways, all members of that genus have been excluded from consideration in this table. In all four comparisons, at least 72 percent of the species we found were found at the other Table 2. Comparison of species composition of four TV tower kills with the 1982 Alleman TV tower kill.

Tower Kill	No. Species Found	No. Shared with 1982 Kill	Percent Shared
14 Sep 1982, Alleman, IA	32	32	100
12 Sep 1974, Alleman, IA	36	26	72
13 Sep 1974, Alleman, IA	30	24	80
9-10 Sep 1962, Eau Claire, WI	32	24	75
9-10 Sep 1962, Westport, MN	23	20	87

Empidonax flycatchers not included

kills. The three most numerous species we found (Red-eyed Vireo, Swainson's Thrush, Ovenbird) were also the most numerous at kills in Wisconsin (Red-eyed Vireo), Minnesota (Swainson's Thrush), Alleman on 12 September 1974 (Red-eyed Vireo), and Alleman on 13 September 1974 (Ovenbird) (Kemper et al. 1966, Mosman, pers. comm.). Probably the most dramatic departure from Mosman's findings was the few Nashville Warblers we found (only 5 compared to 236 by Mosman). However, Nashvilles generally migrate in late September or early October (216 of these were on 1 October 1973). Mosman found 478 Red-eyed Vireos killed on 12 September 1974, a strikingly similar date to our large kill of that species. Somewhat surprisingly, we found no wrens although most of those found by Mosman were killed in late September or early October.

On the night of the 13th, the winds were from the north at 10-20 mph, the temperature was in the high 50s, and there was a low cloud cover that obscured the top third of the towers. This cold front had reached the area in mid-afternoon on 13 September and was the first major front in the area in about two weeks. It seems pertinent to note that on the same night a massive flight of upwards of 60,000,000 birds passed south through the Red River Valley near Grand Forks, N.D., some 500 miles north and west of central Iowa (Lambeth 1983).

On the next night, there was another much smaller kill at the east tower. On that night, 35 birds of 15 species were killed. Only the Red-headed Woodpecker and Magnolia Warbler were species not represented in the kill on the night of 13-14 September.

We thank personnel of the two towers for allowing us access to the property to pick up birds and also for notifying Dinsmore of the kill. Nancy Basore helped pick up birds on the 15th.

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Iowa Ornithologists' Union Meeting — Fall 1983

FRANCIS L. MOORE

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WATERLOO, IA.

The annual fall meeting of the Iowa Ornithologists' Union was held in the Coralville, Iowa City, Iowa area on Friday, Saturday and Sunday, October 21, 22 and 23, 1983. Planning, coordination and hosting of the meeting was the responsibility of the Iowa City Bird Club who did an excellent job with everything involved.

On Friday evening there was an informal social gathering at the home of Dick Tetrault to give old friends and new a chance to talk birding and get in tune for the activities to follow the next couple of days. Field trip information and sign ups for the following morning were also available. It was also an excellent opportunity to meet our featured speaker for the program to be held the next day, Bruce Peterjohn.

Saturday morning field trips assembled at the Ambassador Inn in Coralville with the Ambassador Inn being the base of operation for all I.O.U. activities on Saturday and Sunday. Field trips were scheduled for the good birding spots around the area culminating in registration at 11:30 a.m. to 1:00 p.m.

Following registration Tom Kent and Jim Dinsmore made a presentation on the "Regional Distribution of Iowa Birds" followed by Mike Newlon with "Bird Migration and the Weather" and our featured speaker, Bruce Peterjohn, Regional Editor of *American Birds*, with a superb indepth presentation on the "Identification of Gulls."

After Bruce Peterjohn's inspiring program there was a short business meeting, brought to order by President Mike Newlon. Pete Petersen made a motion that the spring minutes be approved as published in the June 1983 issue of *Iowa Bird Life*. Hank Zaletel seconded the motion. Motion carried. President Newlon brought up the fact that the newsletter had been shelved for the time being for lack of an editor and that the publicity and membership committees were also dying for lack of chairmen. He then asked for volunteers for these important positions.

Pete Petersen made a motion that the I.O.U. reimburse expenses necessary for the operations of the Records Committee, these expenses being the cost of postage and copies for records received by the several members of the committee, probably to be between \$100 and \$200 annually. Rich Hollis proposed an amendment to the motion to include these same costs for the field reports editor of *Iowa Bird Life*. The amendment was accepted by Pete Petersen. The amended motion was seconded by Carl Bendorf. The motion carried as amended.

After short discussion Tom Kent made a motion that our organization send a letter to the Iowa D.O.T. commending them on their use of reduced roadside mowing in the state of Iowa and encouraging them to continue with this program. The motion was seconded by Carol Newlon. The motion carried.

President Newlon discussed the idea of having an Iowa Breeding Bird Atlas. The Breeding Bird Atlas is a geographical distribution of the breeding birds of an area (see back page, this issue). Mike thought that this would give Iowa birders a way to help determine the breeding bird distribution of Iowa. After some discussion Dave Newhouse made a motion that the I.O.U. initiate the Breeding Bird Atlas survey for the state of Iowa and invite suitable co-sponsors and give the I.O.U. president the power to appoint members of the coordinating committee. Rick Hollis seconded the motion. The motion carried. President Newlon then adjourned the meeting until the following afternoon (Sunday).

The banquet was held in the Ambassador Room at the Ambassador Inn. Following a very good buffet meal there was another round of "Stump the Experts" slide presentation. The "experts" fooled this time were Bruce Peterjohn, Ross Silcock and Francis Moore. Tom Kent said he did not try to make the identifications as difficult as it evidently turned out to be to the panelists. It was a lot of fun for everyone (and showed how hard it is for anyone to identify Thayer's Gull. ed.).

Sunday morning field trips departed from the Ambassador Inn parking lot bright and early with hopes of many rarities to report at the afternoon compilation. Everyone then showed up for a filling buffet lunch at the Ambassador Inn. The business meeting was then called back to order by President Newlon who announced the spring convention would be held at Indianola on May 5 and 6, 1984. The resolutions committee then gave their report:

Be it resolved by the fall 1983 I.O.U. meeting on October 21, 22 and 23, 1983 that we the members thank the Iowa City Bird Club for planning and hosting the fall meeting. Be it further resolved that:

1. Special thanks go to Bernie Knight, M.L. Huit, Mike Newlon and Carol Thompson.
2. Bernie Knight for designing and providing table decorations.
3. To the Ambassador Inn for their hospitality.
4. To presenters Tom Kent, Jim Dinsmore and Mike Newlon.
5. To guest speaker Bruce Peterjohn for traveling from Ohio to share his presentation on gulls with us.
6. To Rick Hollis and Tom Staudt for organizing field trips.
7. I.O.U. members who helped in leading the field trips.
8. Special thanks to Dick Tetrault for graciously hosting the Friday night gathering.

Carl Bendorf made a motion to accept the resolutions committee report. The motion carried.

Pete Petersen led the compilation of the bird list with 105 species being seen on Sunday. Tom Kent made a motion that the meeting be adjourned. The meeting then adjourned.



Bruce Peterjohn, photo by Hank Zaletel

Birds Observed on Oct. 13

Pied-billed Grebe, Double-crested Cormorant, Great Blue Heron, Great Egret, Canada Goose, Wood Duck, Green-winged Teal, American Black Duck, Mallard, Northern Pintail, Gadwall, American Wigeon, Canvasback, Ring-necked Duck, Lesser Scaup, White-winged Scoter, Ruddy Duck, Osprey, Bald Eagle, Northern Harrier, Sharp-shinned Hawk, Cooper's Hawk, Red-tailed Hawk, American Kestrel, Ring-necked Pheasant, American Coot, Black-bellied Plover, Killdeer, Greater Yellowlegs, Lesser Yellowlegs, Spotted Sandpiper, Sanderling, Least Sandpiper, Pectoral Sandpiper, Dunlin, Common Snipe, American Woodcock, Bonaparte's Gull, Ring-billed Gull, Herring Gull, Caspian Tern, Rock Dove, Mourning Dove, Barred Owl, Belted Kingfisher, Red-headed Woodpecker, Red-bellied Woodpecker, Downy Woodpecker, Hairy Woodpecker, Northern Flicker, Eastern Wood-Pewee, Eastern Phoebe, Horned Lark, Tree Swallow, Barn Swallow, Blue Jay, American Crow, Black-capped Chickadee, Tufted Titmouse, Red-breasted Nuthatch, White-breasted Nuthatch, Brown Creeper, Carolina Wren, Winter Wren, Sedge Wren, Marsh Wren, Golden-crowned Kinglet, Ruby-crowned Kinglet, Eastern Bluebird, Hermit Thrush, American Robin, Gray Catbird, Brown Thrasher, Water Pipit, Cedar Waxwing, European Starling, Orange-crowned Warbler, Nashville Warbler, Yellow-rumped Warbler, Palm

Warbler, American Redstart, Northern Cardinal, Rufous-sided Towhee, Chipping Sparrow, Field Sparrow, Vesper Sparrow, Savannah Sparrow, Fox Sparrow, Song Sparrow, Lincoln's Sparrow, Swamp Sparrow, White-throated Sparrow, White-crowned Sparrow, Harris' Sparrow, Dark-eyed Junco, Red-winged Blackbird, Eastern Meadowlark, Common Grackle, Brown-headed Cowbird, Purple Finch, Pine Siskin, American Goldfinch, and House Sparrow.

Additional species recorded Saturday, Oct. 22 only: American Bittern, Green-backed Heron, Blue-winged Teal, Redhead, Yellow-bellied Sapsucker, Northern Rough-winged Swallow, Solitary Vireo, Rose-breasted Grosbeak, and Clay-colored Sparrow.

ATTENDANCE REGISTER

AMES: James and Steve Dinsmore, David and Jeanne Edwards, Dave and Mary Newhouse, and Joe Schaufenbuel.

BOONEVILLE: Eugene and Eloise Armstrong.

BURLINGTON: Jane C. Fuller.

CEDAR RAPIDS: Rob and Karen Bradley, James F. Landenberger, Beryl and Patricia Layton, and Roberta A. Oppedahl.

COLO: Hank Zaletel.

CORALVILLE: Bob Lechner.

DAVENPORT: Ann Barker, Corey Blevins, Peter and Mary Lou Petersen.

DES MOINES: David Ewert, Robert W. Howe, Dick and Pauly Mooney.

ELDORA: Nancy Slife.

ESTHERVILLE: Harold White and daughter.

FORT DODGE: Mary Kuhlman and Mina Landes.

HASTINGS: Barb Wilson

INDIANOLA: Jim Sinclair.

IOWA CITY: Chris Balk, Colleen Bettini, Carl J. Bendorf, Elizabeth Christiansen, John Cordell, Jim and Carole Fuller, O. J. Gode, Richard J. Hollis, M. L. Huit, James Huntington, Tom Kent, Cal and Bernie Knight, Richard and Nancy Lynch, Ramona McGurk, Michael C. and Carol Newlon, Mary Noble, Evelyn Oaks, Mary Parrott, Terry and Anne Perkins, Jim Sandrock, Thomas J. Staudt, Richard Tetrault and Carol Thompson.

LAKE MILLS: Sibyl Sand.

LAURENS: Dr. and Mrs. Ronald Harms.

LISCOMB: Beth Proescholdt.

MALVERN: W. Ross Silcock.

MARION: Lucille Liljedahl.

MARSHALLTOWN: Marlys Huff, James and Pauline Mairs, Carol McMullen, Mr. and Mrs. Ed Savage.

MONTEZUMA: Darwin Koenig.

MUSCATINE: Gerald D. White.

NORTH LIBERTY: Ann Feddersen.

OSKALOOSA: Keith and Irene Layton.

RIVERSIDE: Bonnett and Gerald Ludwig.

UNION: Phyllis J. Harris.

WATERLOO: Francis L. Moore.

WAUKEE: Mark Dixon.

HERRIN, Illinois: John Robinson.

PROSPECT HEIGHTS, ILLINOIS: Bill and Mark DeBaets.

ROCK ISLAND, ILLINOIS: Larry Linder.

COLUMBIA, MISSOURI: Bill Clark.

OMAHA, NEBRASKA: Tanya Bray.

WATERVILLE, OHIO: Bruce Peterjohn.

FIELD REPORTS
FALL 1983

Thomas H. Kent, Field Reports Editor
211 Richards Street
Iowa City IA 52240

WEATHER AND HABITAT CONDITIONS (JPSa)

The hot, sunny, dry, hazy weather pattern established in June continued through August. Many heat and low rainfall records were reported, especially in southern and western areas of the state. Unseasonably hot weather prevailed, making this the second hottest August on record. The state averaged about 20 days with temperatures over 90--about three times normal. Readings of 100 or higher were reported on 20 days at Leon and on 11 days at Bloomfield; not since 1955 had a higher temperature than 108 (at Des Moines and Keosauqua) been recorded. Precipitation occurred in the latter third of the month, but the rainfall deficiency which began on July 4 or earlier caused areas of extreme drought, especially in southeast Iowa.

September too was warm for the first ten days and last six days. Precipitation continued to be subnormal over the southwest third of the state, but some localities experienced heavy rainfall, notably 9.6 inches at Marble Rock and, in one night, 5.39 inches at Mt. Pleasant. A state-wide freeze occurred on 21-23 September, while damaging hailstorms on 5-6 September battered Pocahontas, Montgomery, and Mills counties. Winds on the same dates reached 92 mph at Red Oak.

Mild, cool, wet weather characterized October and most of November. The first measurable snowfall occurred on 13 October, but both temperatures and rainfall were near normal for the period. Only in the last week of November, when a violent snow and ice storm covered west, central, and northern Iowa, was the generally warm, dry weather pattern broken.

GENERAL TRENDS

The warm weather seemed to be associated with a number of late migrants, although my method of identifying unusual dates has improved (see Comment). Evening Grosbeaks staged an invasion and the Northern Goshawk invasion of the last two years was still in evidence. Uncommon species seen in more than usual numbers included Greater Scaup, White-winged Scoter, Sanderling, and Pine Warbler. Carolina Wrens are returning to Iowa. In Keosauqua, 150 sparrows were found dead on one lawn in one day. This was attributed to pesticides used on spider mites in soybean fields; 100 dead robins were reported from another location (JPSa).

UNUSUAL SIGHTINGS

The most viewed bird of the season was Iowa's fifth Sabine's Gull at Saylorville Res. A Brant shot in Fremont Co. would be only the second definite record for the state. Great-tailed Grackles were still present at Riverton A. Other accidentals included a Black Scoter and another female Black-headed type grosbeak. Casual species included Ibis sp., Surf Scoter, Ferruginous Hawk, Prairie Falcon, Buff-breasted Sandpiper, and Bewick's Wren. Rare among the regular species was a Varied Thrush.

SPECIES DATA (* = documented)

Common Loon: 2 Aug sightings may represent summering birds: 4 Aug at Big Creek L. (TH) and 13 Aug at IPL Ponds (CJB, et al.). Up to 6 migrants were seen on major water areas from 31 Oct to 13 Nov.

Pied-billed Grebe: An adult with a downy chick was observed at Larson M. on 24 Aug (PM). Peak migration was 133 at Willow Sl. on 2 Oct (BLW); 1 at L. Manawa on 26 Nov was the latest (Melba Wigg fide TB).

- Horned Grebe:** 7 were at Spirit L. on 6 Oct (DCH); the rest were seen on reservoirs from 31 Oct to 20 Nov with peak of 30 at Saylorville on 12 Nov (SD, JPSc).
- Eared Grebe:** 2 at Elm L. on 31 Oct (SD) were the only reported.
- Western Grebe:** 9 (3 dark phase, others not determined) stopped briefly at Coralville Res. on 16 Oct (THK, CJB, TJS).
- American White Pelican:** 2 were at Sunken Grove on 13 Aug (RVH); peaks were 800 at Saylorville Res. on 23 Sep (HZ), 150 at Spirit L. on 3 Oct (DCH), and 80 at Willow Sl. on 5 Oct (BLW); the last were 4 at Rathbun Res. on 7 Nov (MAH), a third latest record.
- Double-crested Cormorant:** Peaks were 300 at Coralville Res. on 29 Sep (TJS), 180 at Willow Sl. on 2 Oct (BLW), and 152 at Saylorville Res. on 6 Oct (HZ); the latest was at Saylorville on 25 Nov (FL).
- American Bittern:** 2 each reported from Johnson and Story counties, 1 from Dickinson; the last on 11 Nov at Hendrickson M. (SD) ties the second latest.
- Great Blue Heron:** The peak at Coralville Res. was 150 on 16 Oct with the last there on 19 Nov (THK).
- Great Egret:** Peaks were 82 at Coralville Res. on 29 Sep (TJS) and 39 at Saylorville Res. on 30 Sep (HZ); 1 in Marshall Co. on 7 Nov (MPr fide BPr) is the second latest.
- Little Blue Heron:** 2 imm. each were seen at Sweet M. on 5 Aug (RKM) and at Nashua on 6 Aug (RKM, FM).
- Cattle Egret:** Singles in Fremont Co. on 5 Aug (B. J. Rose fide TB) and Hancock Co. on 20 Oct (JLH) were the only reports, many fewer than last year.
- Green-backed Heron:** 1 at Weise Sl. on 21 Oct (JR) ties the second latest.
- Black-crowned Night-Heron:** 17 at Willow Sl. on 6 Sep (BLW) was the most reported.
- Yellow-crowned Night-Heron:** An imm. was at Riverton A. on 14 Sep (*MN). Details were given for 2 imm. at Coralville Res. on 5 Sep (THK, TJS, CJB).
- Ibis sp.:** 2 birds at Otter Creek M. on 27 Sep had no white on the face and appeared to have dark eyes, findings suggestive of Glossy Ibis (*FM, *RKM, Ed Weiner).
- Tundra Swan:** All were seen from 21 to 30 Nov with peak of 165 at Lock and Dam 9 (FM); others were 25 at Barringer Sl. on 24 Nov (Harvey Baker fide RVH), 1 unidentified swan at L. Manawa on 25 Nov (BP, LPa), 1 at Amana L. on 26 Nov (LH fide CJB), and 1 at George Wyth S.P. on 28 Nov (RKM, TJS).
- Greater White-fronted Goose:** 4 were at Rathbun Res. on 23 Nov (RC).
- Ross' Goose:** Several were at DeSoto N.W.R. on 20 Nov (Erv Klaas fide JJD).
- Brant:** A Black Brant was shot 6 n. of Riverton A. on 18 Nov and photographs were taken (Don Priebe fide *RP, Carl Priebe).
- Wood Duck:** 1 was still at Big Creek L. on 25 Nov (FL).
- American Black Duck:** 3 were unusual in Sioux Co. on 26 Aug (GJB).
- Northern Shoveler:** 40 were still at Saylorville Res. on 20 Nov (SD, MD).
- Ring-necked Duck:** 300 were at Saylorville Res. on 13 Nov (TB, WRS, BLW) and 1000 on the Keokuk Pool on 20 Nov (THK, CJB, TJS).
- Greater Scaup:** 2 females killed by hunters at Rice L. on 8 Nov were seen in hand (JLH); 3 females were identified by head shape and long wing stripe at Montrose on 20 Nov (*THK, *TJS); 4 males were identified by head shape and size at Lock and Dam 9 on 21 Nov (*RKM); 3 males were identified by head shape and wing stripes at Volga River A. on 25 Nov (*FM).
- Oldsquaw:** Singles were at Amana on 18 Nov (CJB, LH) and George Wyth S.P. on 26 Nov (RKM, TJS).
- Black Scoter:** A female was seen in the sand pits at Colfax (*CJB, *TJS, *THK). A photo was taken of a mounted female shot at Amana L. in 1980 by Lynn Trumpold (CJB).
- Surf Scoter:** 1 of 3 birds shot at Amana L. on 22 Oct (during the IOU fall meeting) by Lynn Trumpold was photographed later (CJB).
- White-winged Scoter:** 3 males were reported, the first of which was seen

- by many at the IOU fall meeting: 23 Oct at Coralville Res. (*BLW, *FM, *TJS), 11 Nov at Colfax (*TJS), and 20 Nov s. of Montrose (*TJS). Another bird was identified by the white wing patch se. of Ventura on 21 Oct (JLH).
- Hooded Merganser: 29 at Spirit L. on 17 Nov (DCH) and 5 reports of 2 to 7 birds from 20 to 24 Nov suggest a rather sharp migration interval.
- Ruddy Duck: 500 were at Saylorville Res. on 12 Nov (SD, JPSc).
- Turkey Vulture: 263 were counted at L. Wapello on 12 Sep (TB, DB); 1 in NE Louisa Co. on 19 Nov (PCP, CBI) was quite late.
- Osprey: The earliest was at Nashua on 6 Aug (RKM, FM) and the latest at L. Manawa on 23 Oct (BP, LPa).
- Northern Harrier: Small numbers were reported by many observers.
- Cooper's Hawk: 5 were reported.
- Northern Goshawk: 4 of 5 documented sightings were of adults: 31 Oct in NE Madison Co. (*EuA), 11 Nov an imm. at Sweet M. (*RKM), 26 Nov at Red Rock Res. (*GJB), 26 Nov in NE Mills Co. (*BLW), 26 Nov in Cedar Falls (*FM). There were 4 other reports, including 1 dead in Madison Co. (fide EuA).
- Red-shouldered Hawk: 1 was at Sweet M. on 5, 28 Aug (RKM, FM).
- Broad-winged Hawk: 600 were migrating in Fremont Co. on 2 Oct (Don Priebe fide RP); 92 were over Iowa City on 22 Sep (TJS); 1 was late in NE Louisa Co. on 29 Oct (PCP, MLP).
- Swainson's Hawk: Ron Harms, et al., photographed a remarkable flock of 53 birds on the ground in Pocahontas Co. on 2 Oct, a migration staging event that was witnessed once before in Iowa when 200-300 were seen in Dickinson Co. on 5 Oct 1940 (Williams, N. J. 1940. Migration of Swainson's Hawk in Western Iowa, Iowa Bird Life 11:35). Other birds were seen in Lyon, Osceola, and Pottawattamie counties.
- Red-tailed Hawk: 35 were migrating at Ames on 13 Oct (SD). Krider's Hawks were reported from Osceola (DCH) and Cherokee (MMB) counties and Harlan's Hawk from Cherokee Co. (MMB).
- Ferruginous Hawk: Jean Braley supplied notes (*fide RP) on a bird with rufous on the back and rufous feathered legs seen at close range eating a rabbit e. of Shenandoah on 26 Oct.
- Rough-legged Hawk: The earliest was on 16 Oct in Dallas Co. (EuA, DT).
- Golden Eagle: 1-2 were in Allamakee Co. on 21, 25 Nov (RKM, FM).
- American Kestrel: 17 were migrating at Ames on 16 Oct (SD).
- Merlin: 1 was at Coralville Res. on 10-11 Sep (*MN, *THK) and 1 at Rathbun Res. on 15 Oct (*RC).
- Peregrine Falcon: 1 was at Coralville Res. on 2 Oct (*MN); sightings at Ames on 10 Oct, 6 Nov, and 16 Nov may have been the same bird (***PM).
- Prairie Falcon: An injured bird in NC Sioux Co. on 21 Sep was taken to the University of Minnesota for rehabilitation (DCH).
- Gray Partridge: 2 were in NE Mills Co. on 26 Aug (Eric Nyren fide BLW).
- Virginia Rail: 4 were at Hendrickson M. on 24 Sep and 1 there on 9 Oct (SD) is the latest fall record.
- Sora: 50 were at Hendrickson M. on 1 Oct, 15 on 9 Oct, and 1 on 15 Oct (SD).
- Common Moorhen: 1 was at Waterloo on 4 Oct (RKM, et al.).
- Black-bellied Plover: 3 were at Sioux Center on 27 Sep (GJB); 1 lingered at Coralville Res. until 23 Oct (THK, et al.).
- Lesser Golden-Plover: 65 was a large fall flock at Coralville Res. on 24 Sep (MCN); 2 at Rathbun Res. on 13 Nov (WMH, MAH) are the third latest.
- Semipalmated Plover: 1 at Fairport Fish Hatchery on 23 Oct (JR, et al.) was the second latest on record.
- Piping Plover: Singles were at IPL Ponds on 13 Aug (CJB, et al.) and Nashua on 20 Aug (FM, RuH).
- Greater Yellowlegs: Peak was 15 at Colo on 7 Aug (SD, JJD); the last were 2 at L. Manawa on 6 Nov (BP, LPa).
- Lesser Yellowlegs: Peak was 125 at Colo on 7 Aug (SD); 2 at Coralville Res. on 13 Nov (THK, TJS) are the latest on record.
- Solitary Sandpiper: 2 at Coralville Res. on 8 Oct (THK, TJS) are the

- second latest; 1 was also late at Ames on 2 Oct (PM).
- Willet:** 2 were at Coralville Res. on 13 Aug (PCP, CBI); 1 was at Sioux Center on 19 Aug (GJB).
- Spotted Sandpiper:** 1 at Coralville Res. on 23 Oct (THK, et al.) was the second latest.
- Upland Sandpiper:** 2 were in Lyon Co. on 1 Aug (DCH) and 7 in Decatur Co. on 21 Aug (JDG); 1 in Decatur Co. on 29 Sep (JDG) is the third latest.
- Sanderling:** Many more than usual were reported and over a broad time span from 7 counties. The earliest was on 8 Aug at Colo (HZ), the peak of 30 at Rathbun Res. on 11 Oct (WMH, MAH, RC), and the second latest on record at Rathbun Res. on 29 Oct (RC). Another was late at Fairport on 23 Oct (TB, et al.).
- Semipalmated Sandpiper:** 1 was late at the Fairport Fish Hatchery on 21 Oct (*JR). The Coralville Res. peak was 146 on 21 Aug and last on 17 Sep (MCN).
- Western Sandpiper:** 1 was at Sioux Center on 19 Aug (*GJB). Details were provided for 3 at Riverton A. on 13 Aug (CJB) and 10 at Coralville Res. on 28 Aug (MCN).
- Least Sandpiper:** The last seen were at Fairport on 23 Oct (JR).
- White-rumped Sandpiper:** 3 small, dark-legged sandpipers seen with Least Sandpipers exhibited white rumps when preening at Cherokee on 20 Oct (MMB). There are less than 10 fall records of this species, the latest from 10 Sep.
- Baird's Sandpiper:** Peak was 19 in Fremont Co. on 13 Aug (MCN); the last was seen in Sioux Center on 17 Oct (GJB).
- Pectoral Sandpiper:** Peak was 354 at Coralville Res. on 21 Aug (MCN); the last were 15 at Fairport on 23 Oct (JR).
- Dunlin:** Small numbers were seen from 10 to 23 Oct.
- Stilt Sandpiper:** Peaks were 52 at Coralville Res. on 21 Aug (MCN) and 50 at Sioux Center on 12 Oct (GJB); the last at Sioux Center on 25 Oct (GJB) are the latest on record.
- Buff-breasted Sandpiper:** More than usual were reported: 2 at Amana on 3 Aug (CJB, LH), 1 at IPL Ponds on 5 Aug (B. J. Rose fide TB), 2 at Riverton A. on 12 Aug (CJB, MCN, TJS), 1-3 at Waterloo on 20, 27 Aug (RKM, FM), and 1-3 at Coralville Res. from 28 Aug to 17 Sep (MCN, et al.).
- Short-billed Dowitcher:** Sightings with diagnostic details were all from Coralville Res. (MCN, THK); 1-2 in alternate plumage (moulting) on 13, 14 Aug; 1-15 juveniles on 21 Aug, 5, 10, 11 Sep.
- Long-billed Dowitcher:** 1 juvenile was described at Coralville Res. on 24 Sep (MCN) and 2 of unstated plumage were heard at Otter Creek M. on 29 Sep (PCP).
- Common Snipe:** 27 arrived early in Cherokee Co. on 1 Aug (MMB); 65 were at Doolittle Prairie on 16 Oct (SD).
- American Woodcock:** 1 was at Weise Sl. on 21 Oct (JR).
- Wilson's Phalarope:** 4 at Sioux Center on 19 Sep (GJB) tie the second late date; 1 at Coralville Res. on 17 Sep (MCN) was also late.
- Franklin's Gull:** Peak was 35 at Saylorville Res on 6 Oct (HZ) and 1 there on 25 Nov (JJD) is the second latest. Another was late at Red Rock Res. on 23 Nov (CJB).
- Bonaparte's Gull:** The first were noted at Coralville Res. on 16 Oct (THK); the peak was 50 at Saylorville Res. on 12 Nov (SD, JPSc).
- Ring-billed Gull:** 1 was early at Credit Island on 11 Aug (PCP). The first appeared at Coralville Res. on 11 Sep with peak of 1800 on 24 Nov (THK). This was dwarfed by 4500 at Saylorville on 20 Nov (SD, MD).
- Sabine's Gull:** A juvenile at Saylorville Res. on 10-23 Nov was photographed (THK, PCP) and documented (*EIA, *CJB, *TJS, *PCP, *THK, *JJD, *HZ, *MN, *FM, *RKM, *BPr, *BLW) for Iowa's fifth record (see Notes).
- Caspian Tern:** The first was at Nashua on 5 Sep (FM); the peak was 90 at Coralville Res. on 25 Sep (THK); and 4 at Rathbun Res. on 7 Nov (MAH) are the latest on record.
- Common Tern:** Birds with dark primaries were 8 at West L., Scott Co., on

- 28 Aug (GDW), 2 at Nashua on 5 Sep (FM), and 4 at Coralville Res. on 11 Sep (THK, TJS, CJB).
- Forster's Tern: 1 at Coralville Res. on 20 Oct (*BPe) is the second latest on record.
- Least Tern: 2 imm. were at IPL Ponds on 20 Aug (BPa, LPa).
- Black Tern: Peaks were 40 at IPL Ponds on 20 Aug (BPa, LPa) and 30 at Coralville Res. on 10 Sep (RJH, MCN, CN). Record late birds were seen at Rathbun Res. on 9 Oct (MAH, WMH) and IPL Ponds/L. Manawa on 2 Oct (TB).
- Black-billed Cuckoo: The last was on 11 Oct in Cherokee Co. (MMB).
- Yellow-billed Cuckoo: 20 were in Webster Co. on 2 Aug (GDW); the last was in Mills Co. on 12 Oct (BLW). There were few data on cuckoos, but I talked to several people who felt that more lingered later than usual, perhaps due to the large crop of tent caterpillars.
- Common Barn-Owl: 1 was found near Booneville on 25 Nov (EuA).
- Snowy Owl: A sick bird picked up in NE Mills Co. on 15 Nov died (BLW, TB).
- Long-eared Owl: 2 were at Saylorville Res. on 20 Nov (SD, MD) and one in Decatur Co. on 25 Nov (JDG).
- Short-eared Owl: 5 reports from 4 counties.
- Northern Saw-whet Owl: 1 was called in by a Screech-Owl tape in Cherokee Co. on 10 Oct (MMB); 1 was in Cedar Falls on 9 Nov (RKM).
- Common Nighthawk: Peak was 167 in Iowa City on 24 Aug (MCN); 1 at Ames on 18 Oct (PM) was the latest on record; other late dates were 2 Oct at Iowa City (RJH) and in NE Mills Co. (BLW) and 3 Oct at Fairfield (DCP).
- Chuck-will's-widow: 1 at Waubesa on 13 Aug (MCN) is the second latest.
- Whip-poor-will: The last was n. of Ames on 2 Oct (SD).
- Chimney Swift: 1000 swirled over Fairfield on 20 Sep (DCP); 1 at Ames on 19 Oct (PM) is the latest on record and 8 were in Johnson Co. on 14 Oct (TJS); October dates were reported from 3 other counties.
- Ruby-throated Hummingbird: Peak was 12 at Lamoni on 11 Sep (JDG) and last in Iowa City on 5 Oct (TJS).
- Red-headed Woodpecker: Birds lingered because of the good acorn crop (BLW).
- Olive-sided Flycatcher: The first was in Palo Alto Co. on 14 Aug (RVH); peak of 5 in Story Co. on 28 Aug (PM); and last in Ames on 28 Sep (PM), a second latest date.
- Eastern Wood-Pewee: 22 were in Cherokee Co. on 30 Aug (MMB); 1 at Credit Island on 23 Oct was studied by many and call note heard (*BPe). This is the latest record of this species.
- Yellow-bellied Flycatcher: There were 7 reports from 21 Aug to 5 Oct from Davenport, Iowa City, Ames, and Winneshiek Co. (PCP, TJS, PM, THK).
- Alder Flycatcher: Fall records for this species are unusual, but birds singing 'fee-be-o' were heard at Sweet M. on 5 Aug (RKM) and Hickory Hill P. on 8 Sep (TJS).
- Eastern Kingbird: An imm. at L. Manawa on 2 Oct (TB) is the third latest.
- Scissor-tailed Flycatcher: 1 was reported from near Fontanelle, Adair Co., on 21 Jun (Scott Felker); another was seen in Ames on 31 Aug (Phillip Mulder).
- Tree Swallow: 1-2000 were at Oakville on 31 Aug (PCP), Storm L. on 1 Oct (DBi), and Coralville Res. on 20 Oct (MCN); the last were reported on 29 Oct in NE Louisa Co. (PCP, MLP).
- Northern Rough-winged Swallow: 500 at L. Manawa on 2 Oct (TB) are not only a large number but also the second latest date.
- Cliff Swallow: 800 were in Cherokee Co. on 15 Aug (MMB).
- Barn Swallow: The last was reported from Muscatine Co. on 23 Oct (JR).
- Blue Jay: 225 were migrating in NE Mills Co. on 1 Oct (BLW) and 200 at Fairfield on 3 Oct (DCP).
- American Crow: The Ames roost was forming with 215 birds on 25 Sep (JJD).
- Red-breasted Nuthatch: The first appeared n. of Akron on 20 Aug (HK)

- in spite of the hot weather; 1 was at Davenport by 4 Sep (PCP) and Pochontas by 21 Sep (RVH).
- Brown Creeper: The first was reported on 8 Oct at Laurens (RVH).
- Carolina Wren: Good news! Sightings from Davenport (PCP), Lacey-Keosauqua S.P. (TB, JPSa), Marshalltown (fide BPr), Waterloo (FM), Cherokee (DBi, present over a year), and Iowa City (at Jim Fuller's house and seen by many at the IOU meeting).
- Bewick's Wren: 1 was reported at Waterloo on 10 Aug (RKM).
- House Wren: The last was at Weise Sl. on 21 Oct (JR).
- Winter Wren: 8 were at Hickory Hill P. on 10 Oct (TJS).
- Sedge Wren: 1 near Williams Prairie on 23 Oct (THK) is the third latest.
- Marsh Wren: The last was at Coralville Res. on 23 Oct (BLW).
- Golden-crowned Kinglet: A peak of 25 was at Ames on 9 Oct (PM).
- Ruby-crowned Kinglet: 100 were noted in Fairfield on 11 Oct (DCP).
- Blue-gray Gnatcatcher: Singles were at L. Wapello on 13 Sep, Lacey-Keosauqua S.P. on 14 Sep, and Red Haw L. on 17 Sep (TB).
- Eastern Bluebird: 100 were at Cherokee on 13 Oct (MMB).
- Veery: 1 was at Hickory Hill P. on 11 Sep (THK, CJB, TJS).
- Swainson's Thrush: Early and late dates at Ames were 11 Sep and 9 Oct (PM).
- Wood Thrush: 2 were at Fairfield on 6 Oct (DCP).
- American Robin: Up to 300 were migrating in E Iowa on 21-23 Oct (THK, JR).
- Varied Thrush: 1 was reported at Oak Grove P., Sioux Co., on 30 Oct (Gerald Schiefen fide DCH), a record early date.
- Gray Catbird: The last was at Fairfield on 10 Oct (DCP).
- Northern Mockingbird: The only report was from Cherokee Co. on 21 Oct (MMB).
- Brown Thrasher: 1 in NE Mills Co. on 30 Nov was late (BLW).
- Water Pipit: reports were from 7 Oct to 8 Nov with peak of 50 at Coralville Res. on 31 Oct (TJS).
- Northern Shrike: 1 in Fayette Co. on 21 Nov (RKM); 1 in Black Hawk Co. on 29 Nov (FM).
- Loggerhead Shrike: Singles were seen in Polk and Story counties on 24, 25 Nov (SD).
- White-eyed Vireo: 2 in Wapello Co. on 1 Oct (RC) are the latest on record; others were at Hickory Hill P. until 22 Sep (TJS) and Coralville Res. on 11 Sep (THK, TJS, CJB).
- Bell's Vireo: 1 at Sweet M. on 5 Aug was considered unusual for any time of year (RKM); 1 was at Willow S. on 3 Aug (TB, BPa).
- Yellow-throated Vireo: The last was at Ames on 25 Sep (PM).
- Philadelphia Vireo: 4 at Hickory Hill P. on 5 Oct (TJS) are the third latest; 1 was in Wapello Co. on 1 Oct (RC).
- Blue-winged Warbler: 1 at Coralville Res. on 11 Sep (THK); 2 at Lacey-Keosauqua S.P. on 14 Sep (TB).
- Golden-winged Warbler: 1 at Hickory Hill P. on 2 Oct (RJH) is the latest on record.
- Orange-crowned Warbler: The last was at Wildcat Den S.P. on 21 Oct (JR).
- Chestnut-sided Warbler: Peak was 17 on 13 Sep at Ames (PM).
- Black-throated Blue Warbler: 2 on 8 Sep and 1 on 22 Sep at Davenport (PCP); 1 at Ames on 11 Sep (PM).
- Yellow-rumped Warbler: The first was noted at Ames on 17 Sep (PM).
- Black-throated Green Warbler: The last was in Ames on 23 Oct (PM).
- Blackburnian Warbler: The first was in Ames on 20 Aug (PM).
- Pine Warbler: 5 sightings are unusual for this species: 31 Aug at Grammar Grove (*BPr), 6 Sep in Ames (*PM), 11 Sep at L. Wapello (*TB), 19 Sep in Davenport (*PCP), 2 Oct in Des Moines (*DT).
- Cerulean Warbler: 1 was at Ames on 24 Aug (PM).
- American Redstart: 1 at Credit Island on 23 Oct (PCP, et al.) ties the latest date.
- Ovenbird: 1 was found dead on 12 Oct at Fairfield (DCP).
- Northern Waterthrush: 1 arrived at Riverton A. by 13 Aug (MCN).
- Mourning Warbler: 1 on 9 Aug at Bettendorf (PCP) is the earliest record.

- Common Yellowthroat: 1 was still in Wapello Co. on 8 Oct (RC).
- Summer Tanager: 1 at Davenport on 8 Aug (PCP); a female at Nine Eagle S.P. on 10 Aug (TB).
- Scarlet Tanager: 1 at Hickory Hill P. on 12 Oct (TJS) is the third latest; 1 was at Fairfield on 4 Oct (DCP).
- Black-headed Grosbeak: A female with burnt orange breast and fine streaking on sides was seen in Cherokee Co. (*MMB).
- Blue Grosbeak: 4 males were n. of Cherokee on 13 Aug (DBi); 3 birds were in Fremont Co. on the same date (MCN).
- Dickcissel: 1 was still at the home of Judy Carlson in Pocahontas Co. on 26 Nov (fide RVH).
- Rufous-sided Towhee: Western race birds were at Laurens on 6 Oct (Everett Schmidt fide RVH) and in NE Mills Co. on 17 Oct (BLW).
- American Tree Sparrow: The first was at Orange City on 9 Oct (GJB).
- Clay-colored Sparrow: 1 was heard at Coralville Res. on 22 Oct (FM).
- Savannah Sparrow: 7 were late at Rathbun Res. on 12 Nov (RC); 5 were in Story Co. on 8 Nov (PM). 1 was surprised that these were first and third latest dates.
- Henslow's Sparrow: 1 was seen e. of Swan L., Johnson Co., on 29 Sep (*TJS).
- Le Conte's Sparrow: 13 at Rathbun Res. on 15 Oct (RC); 1 at Sweet M. on 9 Oct (FM, RKM).
- White-crowned Sparrow: 50 were at Rathbun Res. on 23 Nov (RC).
- Harris' Sparrow: 275 were seen in Cherokee Co. on 13 Oct (MMB).
- Dark-eyed Junco: The first were noted at Fairfield on 6 Oct (DCP).
- Lapland Longspur: 2000 in Story Co. on 29 Oct (PM) were the most reported.
- Snow Bunting: 2 were early at Volga River A. on 29 Oct (RKM); the peak was 40 at Saylorville Res. on 20 Nov (SD, MD).
- Brewer's Blackbird: a pair were seen in NE Mills Co. on 29 Oct (BLW); a flock of 120 at Saylorville Res. on 20 Nov (SD, JPSc, JJD) is quite unusual for Iowa; a male was described in Hardin Co. on 23 Nov (PH fide BPr).
- Great-tailed Grackle: An adult was still feeding an immature at Riverton A. on 13 Aug (*MN)--see previous issue.
- Northern Oriole: 1 was late at Ames on 13 Sep (PM).
- Pine Siskin: The first were noted in O'Brien Co. on 12 Oct (DBi); other flocks of up to 40 were scattered about the state.
- Evening Grosbeak: The first report of 2 at Swaledale (LG) was among 9 from N Iowa, 5 from C Iowa, and 3 from S Iowa.

CONTRIBUTORS

Eloise Armstrong, Booneville; Eugene Armstrong, Booneville; Russell P. Baldner, Calmar; Carl J. Bendorf, Iowa City; Dick Bierman, Cherokee; Gordon J. Brand, Orange City; Tanya Bray, Omaha NE; Marion M. Brewer, Cherokee; Raymond Cummins, Centerville; James J. Dinsmore, Ames; Steve Dinsmore, Ames; Scott Felker, Ames; Lucille Gaffney, Swaledale; J. Donald Gillaspey, Lamoni; James L. Hansen, Clear Lake; Ronald V. Harms, Laurens; Douglas C. Harr, Larchwood; Marjorie A. Heusinkveld, Centerville; Willis M. Heusinkveld, Centerville; Richard J. Hollis, Iowa City; Tim Huisman, Madrid; Thomas H. Kent, Iowa City; Hank Krause, Akron; Fred Leshner, La Crosse WI; Paul Martsching, Ames; Francis L. Moore, Waterloo; Phillip Mulder, Ames; Robert K. Myers, Waterloo; Michael C. Newlon, Iowa City; Bill Ohde, Mediapolis; Babs Padelford, Bellevue NE; Loren Padelford, Bellevue NE; Bruce Peterjohn, Westerville OH; Peter C. Petersen, Davenport; Ruth Phipps, Shenandoah; Diane C. Porter, Fairfield; Carl Priebe; Beth Proescholdt, Liscomb; John Robinson, Herrin IL; James P. Sandrock, Iowa City; Thomas J. Staudt, Iowa City; Dennis Thompson, Des Moines; Gerald D. White, Muscatine; Barbara L. Wilson, Hastings; and Hank Zaletel, Colo.

OTHER OBSERVERS

Cathryn A. Baldner (RPB); Corey Blevins (PCP); Don Bray (TB); Mark Dixon (SD); Timothy L. Dwyer (GDW); James Fuller (RJH); Lanny Haldy (CJB); Phyllis Harris (BPr); Russell Hays (FM, RKM); Darwin Koenig (TJS); Larry Linder (PCP); Carol McMillen (BPr); Carol Newlon (RJH); Mary Lou Petersen (PCP); Mark Proescholdt (BPr); Joseph P. Schaufenbuel (SD); W. Ross Silcock (TB, CJB); and Ramona Sommerlot (BPr).

COMMENT

With this reporting period I have started to file the data on my personal computer. Previously, the data was copied to notebooks containing a page for each species. With the computer, the data can be added in any order (It's still useful to have the data reported in species order, but not as critical). I have taught the computer how to recognize four letter abbreviations for species, locations, and observers and to play back the full names so that I can check them for accuracy. After all of the data are entered, the computer sorts the records by species and date. A report is then generated that lists species (with early and late record dates for reference); below each species name the records for the season are listed. During the report generation, the computer checks dates and flags unusual ones; it also flags non-regular species and documented reports. Locations are checked and the county and area of the state added automatically. Hopefully, I will be able to combine future files so that all of the data on a species is easily retrieved. With this system the recording of the data was a bit faster than by the hand method and went very fast when Carl Bendorf helped with the inputting into the computer. One of us evaluated the data and read to the other who was typing into the computer. The output was easier to evaluate than the previous hand written entries in notebooks, and the completeness and accuracy of the data was improved. From the 17 pages of primary data (676 individual sightings) and 57 documentations (of 21 species from 25 contributors), I typed the report into a computer file that already contained the headings and species names.

I have had some inquiries about my selection of records to report. It is helpful when contributors flag their most important observations. I might not appreciate some of the more unusual ones from western Iowa. Sometimes large numbers of birds from an area where a species is common obscure sightings from another area where the species is uncommon. In writing the report I try to look at the data without regard to the observer and choose that which seems most important. However, my choices are undoubtedly biased by my own experience. Not all contributors and other observers are cited in the text because their data may be covered in general statements. For example, there were several individual reports of Evening Grosbeaks this fall, but there were too many sightings to mention them individually. The data, however, are important and will be kept, and all contributors are listed.

The winter report for Dec, Jan, and Feb is due on 1 Mar. Again, I want to thank contributors for getting their reports in on time. I would rather have them early with a few later additions so I can spread out the job of compiling the data. The final sort and printout is a rather massive effort for the computer, but is the critical step that determines when I can start writing the report.

General Notes

Gryfalcon in Iowa — a retraction — Recently I reported on a Gyr Falcon (*Falco rusticolus*) specimen taken near Akron, Iowa (Dinsmore 1983). At that time, I reported that the bird had been taken in Iowa, and thus it represented the first authentic Gryfalcon record for Iowa. Recently it has been brought to my attention that although John Knowles, the individual who found the bird, has an Akron, Iowa Mailing address, in fact he lives just west of the Big Sioux River in South Dakota and the bird was found there rather than in Iowa. Thus the Gyr Falcon must be retained as hypothetical in Iowa as it was listed by Kent et al. (1982).

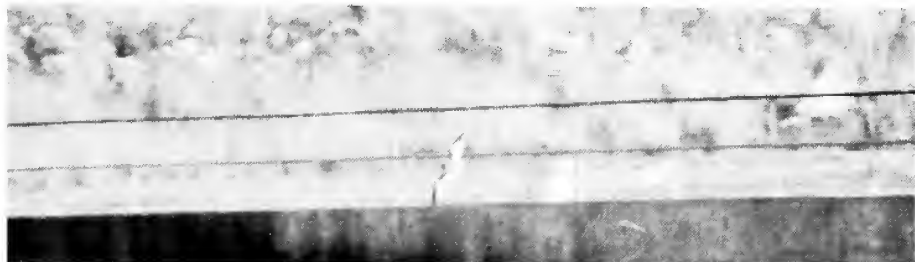
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- James J. Dinsmore, Department of Animal Ecology, Iowa State University, Ames, IA 50011.

Sabine's Gull at Saylorville Reservoir — On November 10, 1983 an unusual gull was noted flying over the Saylorville Reservoir dam by Dr. Bery Engebretson as he drove to work. He notified Eugene and Eloise Armstrong who identified the bird as a juvenile Sabine's Gull and spread the word to other birders.

The following description is a composite of twelve documentations from the numerous individuals who saw the bird from November 10 to 23. This small gull, about two-thirds the size of a Ring-billed Gull, exhibited a fast, graceful, tern-like flight as it foraged for small fish, probably gizzard shad, in the choppy waters below the Saylorville Reservoir dam. It would feed for about five minutes before flying up over the dam where it became lost among the hundreds of ring-bills; once it was spotted resting on the water. Carl Bendorf heard it utter a short, raspy "RAAWK" as it flew over the dam. Dependably, it returned every 30 to 45 minutes for more of the tiny fish in the spillway waters. The upperwing pattern could be spotted from a great distance. The outer primaries and their coverts were black; the inner primaries and outer secondaries and some of their coverts provided a sharply cut off white triangle; and the somewhat mottled, dark brown inner coverts and mantle completed the three-toned wing. The brown of the mantle extended up over the neck and top of the head and onto the side of the neck to form a smudged collar. From beneath the wing pattern was clearly evident in my best photo, but not as striking as when seen from above. The forehead, throat, underparts, and tail were white except for a black band (reported as subterminal by some) on the slightly forked tail. The bill was black and eye dark, with light edge seen by one observer. Legs were variously described as black and of medium tone.

Sabine's Gull nests in the high arctic around the arctic circle and spends the rest of its life at sea, migrating in the eastern Pacific Ocean to wintering grounds off of Peru and in the eastern Atlantic Ocean to southwest Africa. The long migration begins early as typified by the sixty or so midcontinent records since 1960. Fifty of these records, which are widely distributed from Saskatchewan and Ontario in the north to Texas and Louisiana in the south, are equally divided over September and October, with the ten remaining records from November and December. There are also one to three records from April, May, June, July, and August. Records are most likely on the Great Lakes, with the most (11) from Illinois, but the one to eight sightings per year may occur anywhere in mid-continent. Most are juveniles.



Sabine's Gull, Saylorville Dam, 17 Nov. 1983, photo by Jack Holloway

Sabine's Gull is unusual in that juveniles do not moult into first winter plumage until reaching the wintering grounds. Other immature gulls in Iowa arrive in first winter plumage. Both juvenile and adult plumaged Sabine's Gulls are unmistakable because of their wing and back pattern.

There are four previous Iowa sightings of Sabine's Gull. Bartsch (1899) shot juvenile birds north of Burlington on October 15, 1891 and October 12, 1894. The specimens are at the University of Iowa. Another specimen in juvenile plumage, now at the Putnam Museum, was taken by W. L. Allen in Scott County (DuMont 1933), but no date was recorded. The fourth sighting is of a bird at Clear Lake on September 25, 1970 (Brown 1971, Knoop 1983). Knoop saw the bird flying west, low and close to shore, noted "a definite black and white pattern on the back" and identified the bird from books. She assumed the bird to be an adult because, while viewing the books, she could not recall seeing any tail markings. Although the details of the latter sighting are meager, confusion with an immature Black-legged Kittiwake seems unlikely because of the early date and because no black terminal tail band, black half-collar band, or light mantle were noted. sighting is of a bird at Clear Lake on September 25, 1970 (Brown 1971, Knoop 1983). Knoop saw the bird flying west, low and close to shore, noted "a definite black and white pattern on the back" and identified the bird from books. She assumed the bird to be an adult because, while viewing the books, she could not recall seeing any tail markings. Although the details of the latter sighting are meager, confusion with an immature Black-legged Kittiwake seems unlikely because of the early date and because no black terminal tail band, black half-collar band, or light mantle were noted.

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 Knoop, P. 1983. Letter to T. H. Kent.
 T. H. KENT, 211 Richards St., Iowa City 52240.

Great-tailed Grackle in Southwest Iowa: Continuation of an Explosive Range Expansion — In 1983 the Great-tailed Grackle reached Iowa, with two records for the species being accepted by the Records Committee of the Iowa Ornithologists' Union. Iowa's first accepted record was of a par seen along I-29 in Mills County near Folsom Lake on May 19 (*Iowa Bird Life* 53:76). The second record involved two males and a female found at Riverton Game Management Area in Fremont County July 9. The behaviour of these birds strongly suggested nesting, and on July 15 the female was seen carrying food to at least one young bird. Early in August the female was found feeding just one young bird, the latter apparently a male, as it was in the process of molting, with glossy black feathering appearing most noticeably in the mantle area. This series of observations at Riverton thus represents the first breeding of this species in Iowa.

While identification of the Riverton birds is virtually certain based on geographic considerations alone (see below), confirmation of identity as Great-tailed Grackles rather than Boat-tailed Grackles is based on two main points: the flat crowns of the three adult birds formed an almost straight line with their culmens, a considerably different appearance to that seen in Boat-tails, which have an abruptly-rising "forehead", and the female bird had an orangy-colored iris, whereas female Boat-tails have dark eyes.

The occurrence of this species in Iowa represents a further step in the continuing expansion of this species from its "base" in southern parts of the south-

western United States. Pruitt (1975: *American Birds* 29:985), outlined the northward spread of the Great-tailed Grackle into Oklahoma in the 1950s and into Kansas by 1964. Johnsgard (1979: *Birds of the Great Plains*) stated that by 1970 the species had spread into central Kansas, and that in 1977 it bred in Douglas and Adams Counties in Nebraska, adding that these records suggested that "the rapid northern expansion of its range has not terminated." Nebraska's first record was in Phelps County in 1976 (*Nebraska Bird Review* 47:59), and it has been recorded there every year since, and assumed to be breeding (NBR 47:59; AB 33:877). Interestingly, this species appeared in northwest Missouri at about the same time, with what was stated to be the first Missouri record in Holt County May 8, 1976 (AB 30:850). Breeding did not occur in Missouri until 1979 however, when no fewer than 10 nests were found at Big Lake State Park in Holt County in 1979 (AB 33:778). Birds from this colony apparently attempted to overwinter, as the species was reported at the Squaw Creek NWR CBC in 1979 (AB 34:279). To date, there are no winter records for Nebraska. Since these initial observations in Nebraska and Missouri, the species has been found each year, usually in the same locations, but with a few notable exceptions: nesting occurred in Lancaster County in 1981 in an area where the birds had been seen the previous year (NBR 48:77; 49:52), and a male was seen in Wayne County April 14-17, 1979, to date the furthest north record for Nebraska (NBR 47:60). The largest nesting colony in the area seems to be the one at Big Lake State Park in Holt County, Missouri, where a peak of 17 birds were found March 27, 1982 (*Bluebird* 49 (3):22).

From the above records, it seems that the expansion of this species has veered somewhat to the northeast, with south central Nebraska being colonized first, then a stronghold being established in northwest Missouri. To date there are no records from western Nebraska nor from Missouri south of St. Joseph (AB 37:308), suggesting that spring movement northward takes place from established wintering areas near the northward extent of the breeding range. It seems likely that the birds reaching Iowa in 1983 were derived from the population in northwest Missouri, as no wintering areas seem to be established as yet in Nebraska. While a few birds do indeed attempt to overwinter in northwest Missouri (AB 34:279; AB 36:30), the majority appear in late February and remain during the summer (AB 37:308).

Thus it seems that this species may establish itself at least in southwest Iowa and become a regular part of the avifauna of our state. W. ROSS SILCOCK, Box 300, Tabor, IA. 51653.

Book Reviews

A Guide to Field Identification — Birds of North America — Chandler S. Robbins, Bertel Bruun, and Herbert S. Zom — Golden Press, NY — 360 p., 181 p. of color illustrations by Arthur Singer — revised 1983 — paperback \$7.95, hard cover, \$10.95.

When I reviewed the first edition of this guide (IBL 36 p. 61), I said it laid strong claim to becoming the number one field guide. Sales of the first edition show it to be firmly entrenched in that position. This complete revision adds many species which have arrived in North America since 1966 or have been found with greater frequency. It does deal only with North American birds north of Mexico, following the pattern of the original edition and similar guides.

Since most birders are very familiar with the 1966 edition I will briefly summarize the book in this paragraph for those who do not know the book. For each species the book includes color plates depicting significantly different plumages, a range map, and a text paragraph including general status, habitat,

distinguishing characteristics, habits and song. Some songs are also illustrated by sonograms, visual reproductions produced electronically.

The birder who has been using the first edition will find the maps completely redone and showing an enlarged area for species of limited distribution. The names used comply with the new ABA Checklist and the order of the table of contents follows the A.O.U. Checklist. Many of the species added are Alaskan birds but the number of introduced birds included has also been increased. All serious birders will find the new edition a must. ed.

Field Guide to the Birds of North America — Jon L. Dunn, Erik A. T. Blom, George Watson and John O'Neill — National Geographic Society, Washington, D.C. — 464 p., 220 p. of color plates by 14 artists including O'Neill — 1983 — paperbound, \$13.95.

This completely new guide has a similar format to the Golden guide just reviewed. It contains more complete verbal descriptions which are specially helpful for hard to identify groups such as gulls. The scope is North America north of Mexico and not all of North America as the title implies. As one would expect the artwork is not as consistent as in guides done by one artist, but overall it is of high quality. The book is a bit thick to carry easily in a picket and since it is not sold in bookstores it is harder to obtain. Any serious birder should at least examine a copy. It is a very valuable supplementary guide and perhaps now the best solo guide available for the more serious birder. ed.

The Audubon Society Master Guides to Birding — 3 Vols. — John Farrand, ed. — Alfred Knopf, NY — 1248 p., 1245 color photos, 193 paintings, 422 b & w drawings, 650 range maps — 1983 — paperbound with cloth spines, \$13.95 per volume.

The long awaited advanced birders' guides are finally available and it was worth the wait. The work of 61 top birders, they contain detailed species accounts of all 835 species found in North America north of Mexico. Each volume can be carried in the field easily and the books are packed with excellent data. A fine series of color photos supplemented with art work and arranged in A.O.U. order provide a good picture of each bird in almost all significant plumages. For each color rendition a small b & w copy is marked with red triangles which point out key field marks. Below this is a list of these marks and other vital traits. The text descriptions are detailed for each plumage and cover voice, similar species, range data to supplement the maps and the author's name. Accidental species, those recorded "only a handful of times in North America" are at the end of each volume and are not illustrated. Volume 1 covers Loons to Sandpipers, Volume 2 covers Gulls to Dippers, and Volume 3 covers Old World Warblers to Sparrows. All serious birders should have access to this set and will soon find they need their own set. ed.

Weather and Bird Behavior — Norman Elkins. — T. and A.D. Poyser — 239 pages, many drawings, maps and photographs. — 1983 — \$32.50 written by a professional meteorologist, this book attempts to survey all aspects of the relations between birds and weather. Focus is almost entirely on Britain and Europe, but there is much here to interest the American birder, since the principles are the same even if the examples are not.

The book opens with a chapter on weather, local, continental, and global scales, and the forces that govern it. If the chapter has a fault it is attempting too much in too short a space; understanding this chapter is essential to understanding the rest of the book, and it cannot be read casually! I found myself continually referring back to it as I continued through the book. Particularly useful would have been a glossary of technical terms; not being a sailor or meteorologist, I had to consult a dictionary to discover that a "backing" wind was one that was changing in direction counterclockwise.

Succeeding chapters cover all aspects of bird life, including flight, feeding, breeding, migration, and vagrancy. Discussions of weather are followed by discussions of the responses of birds to it. One difficulty here is that birds respond to weather in so many diverse ways that generalizations broad enough to be true become trivial, for example: "... the foremost distinction between summer and winter feeding lies in the type of food available and its distribution." More interesting to me was more anecdotal material. I was fascinated to learn that during the breeding season swifts may cross half of Europe to feed in weather conditions especially favorable for concentrating flying insects; that the Mistle Thrush increased the frequency of its singing during inclement weather; and that the height at which a Skylark sings is a function of the temperature. These are only a few nuggets from a rich lode in the book.

For me the heart of the book was the series of chapters on migration and vagrancy. Migration in the western Palearctic often involves long oceanic crossings and is thus more highly weather-dependent than in the interior of North America. Particularly interesting was Elkins' ability to correlate the phenomena of migration, such as the appearance of large numbers of a particular species, with the weather that produced them. There is drama here, as we are once more reminded of bird's ability to pit their small bodies and impressive instincts against the risks of their migrations. One example of many: the flock of Whooper Swans observed from aircraft and by radar leaving Iceland in the northerly winds associated with a high-pressure system, riding the hurricane-force winds of the jet stream at an altitude of five miles to cross the North Atlantic to Scotland in only seven hours!

The chapters on migration and vagrancy contain most of the material in the book that is directly relevant to North America. Elkins covers briefly some of the major migration systems, mostly as they might relate to the origin of vagrants to the palearctic. Perhaps this book may stimulate some American birders to the kind of detailed analysis of migration and the weather that Elkins has reported here. — Mike Newlon

The Grouse of the World — Paul A. Johnsgard — University of Nebraska Press, Lincoln — 413 p., 57 color & 79 b & w plates — 1983 — \$42.50.

Johnsgard has once again produced a definitive work, this time on the sixteen grouse and ptarmigans of the world. He refuses to split the Lesser Prairie Chicken from the Greater so by AOU standards he is one species short, although he covers both as subspecies. He covers comparative ecology and behavior of the species as well as evolution, management, aviculture and conservation in a general way. For each species the author details range (with maps), weight, measurements, identification, habitat, food, ecology, biology, and reproductive behavior. It is a well written and produced monograph completely covering the subject. ed.

Birding in Ohio — Tom Thomson — Indiana U Press, Bloomington — 256 p., many line drawings & maps — 1983 — \$15.00

This book consists primarily of descriptions of over 200 birding spots. Specific directions for reaching the areas, a brief description of the habitat and regular species are included for each. The back section of the book includes an annotated checklist of Ohio birds which seems to include records through 1981. It seems to be a well done book and should prove useful to visiting birders. A paperback edition might have encouraged the purchase by non-residents. ed.

A Guide to the Birds of Puerto Rico and the Virgin Islands — Herbert A. Raffaele — Fonda Educativo Interamericano, San Juan — 255 p., 24 color & 16 b & w plates — 1983 — paperbound, \$13.95.

This compact guide is a big improvement over previous Puerto Rican books.

The plates are nicely done and well reproduced. They include the Peterson style black lines denoting key field marks. A cross reference to text would have helped for faster use in the field. The text covers detailed identification points, local name, voice, nesting data, distribution and general comments. Seven places to bird are detailed with maps and directions. A locality checklist aids in quick determination of status at the various birding sites. Continental US birds are illustrated, a detail often skipped in Latin American books. ed.

Bird Migration — Chris Mead — Facts on File Publications, NY — 224 p., 20 color & 35 b & w photos, 200 maps — 1983 — \$19.95.

Written by one of the most experienced British banders, this book provides an excellent overview of much of the recent research into bird migration. Drawing from studies done world-wide the author delves into all aspects of his subject including patterns, navigation, evolution, methods of investigation, and ways an individual may observe migration. It provides the best general work on this complex subject this review has seen despite some minor errors regarding North American birds. ed.

Eastern Birds of Prey — Neal Clark — Thorndike Press, Thorndike, ME — 174 p., 1 color & 43 b & w photos — 1983 — paperbound, \$6.95.

This little book presents the basic life history information for the raptorial birds. For each of 26 species the author discusses nesting sites, care of young, feeding and migratory patterns, mating behavior, habitat, ecological status and observational guidelines. It would be an excellent book for a young person just developing an interest in raptors. ed.

Bird Conservation, a journal — Stanley Temple, ed. — U of Wisconsin Press, Madison — No. 1, 148 p. — 1983 — paperbound, \$12.95.

This new journal is to be an annual publication of the US Section of the International Council for Bird Preservation. This first number contains lengthy papers on Peregrine Falcon restoration, Bald Eagle recovery and the California Condor work. Many other projects are updated briefly. ed.

An Address Book for Naturalists — Doris H. Speirs — Natural Heritage, Toronto, Ontario, Canada — 115 p., many line drawings — 1983 — \$9.95.

Everyone has an address book. This one is interspersed with brief Quotation from famous naturalists. It would make a nice gift for anyone interested in nature. ed.

The Encyclopedia of North American Wildlife — Stanley Klein — Facts on File Publications, NY — 320 p., hundreds of color photos — 1983 — \$35.00.

This reference book is well suited to school or public libraries. It is well illustrated with color photos and usually combines accounts of related, similar species. It covers mammals, birds, reptiles, amphibians, and fish with 132 pages devoted to birds. It would be of little value to birders since the information is very general. ed.

The Owl Papers — J. E. Maslow — E. P. Dutton, Inc., NY — 184 p., many line drawings — 1983 — \$17.95.

The author, a self-described "owler", presents a chronicle of birding expeditions in pursuit of these nocturnal creatures. The book is divided into four sections, each of them using a specific owl as an example of an area of bird behavior. This is a book more for the armchair birder than the avid field student. ed.

Nature Through Tropical Windows — Alexander Skutch — U of California Press, Berkeley — 392 p., 43 b & w illus. — 1983 — \$19.95.

Written as a companion volume to *Naturalist on a Tropical Farm* (IBL 51:80), Skutch presents observations of species which he has observed just outside his

window. Not all observations relate to Costa Rica since Skutch began his tropical observations in Panama. Many common tropical birds such as Bananaquit, House Wren, and Blue and White Swallow are chronicled along with more elusive species such as the White-crested Coquette. Skutch won the Brewster Medal in 1983 for the companion volume and displays the same very interesting writing style here. ed.

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Peter C. Petersen, Editor

I certify that the statements made by me above are correct and complete.

Historic Materials Needed

At the Spring I.O.U. meeting held in Ames in May of 1982, members were told of the desire on the part of the Department of Special Collections at Iowa State University's Library to be the repository for historic I.O.U. materials. A call was then made of membership to locate and submit this material to "to preserve the records of the accomplishments and work of the Iowa Ornithologists' Union." At the Fall, 1983 meeting the following materials were given to me to submit to the Department of Special Collections:

1. First constitution of the I.O.U. — 1923 (the minutes of the Feb. 28, 1923 meeting stated that "Chas. J. Spiker of Sioux City, then read an outline of the Nebraska Ornithologist Union constitution and after some discussion this was adopted as read changing the name to the Iowa Ornithologist Union and fixing the annual dues at 50 cents per year.")
2. Membership list for the years 1923-1932.
3. Secretary's minutes 1923-1931.
4. Annual meeting programs 1929-1932, 1934, 1936-1939, 1945, 1953-1955, 1957, 1964, 1971, 1975, 1980-1983.
5. Circular letter — letter of information No. 1-15 and 2 unnumbered (I.O.U. organizational announcements and forerunner of Iowa Bird Life) February,

1923 through September, 1928.

6. Report of Committee for Selection of "State Bird" April 30, 1927.
7. Resolutions adopted at the Annual Meeting May, 1930: passage of the Norbeck-Andresen Bill; passage of McNary-Haugen Bill.
8. Bird list of field trip to Ledges State Park, May 12, 1928, 94 species.
9. Ottumwa Bird Club — Statement of purpose and organization February, 1943.
10. First constitution of Ottumwa Bird Club 1943.
11. Secretary's minutes, treasurer's report, membership list and newspaper clippings of the Ottumwa Bird Club 1943-1946.

If you have historic materials, please send them to me or bring them to an upcoming meeting. I will publicize what has been received and take them to the Iowa State Library.

Hank Zaletel, 715 West St., Colo, 50056

THE IOWA BREEDING BIRD ATLAS

The IOU and the Iowa Conservation Commission have recently taken on the project of producing an atlas containing maps of the breeding distribution within Iowa of all birds that nest within the state. The breeding ranges and critical habitats of many Iowa species remain poorly known and the results of the Atlas Project will be of great value to all who are interested in the protection of Iowa's birdlife. The Atlas will also be a baseline against which to measure the extent and impact of future environmental changes.

To map the state at the required level of detail, we will need to survey about 1,000 "sampling blocks" for their breeding birds and to reduce the resulting mountain of data to usable maps. This will take a tremendous amount of volunteer work, but we hope to finish it within a five-year period, starting in the spring of 1984.

A "sampling block" is a square 3x3 miles in size; this is large enough to contain a representative sample of breeding birds but small enough to be covered adequately in 5-6 mornings afield during the breeding season plus a small amount of time at other seasons of the year. The birds present will mostly be the common breeding species with which all birders are familiar, but there is always the chance of a rare or unusual one to add spice to the search. Most sampling blocks will be distributed in a checkerboard fashion across the state, to ensure even coverage; some will be placed so as to include significant habitats or protected areas.

Atlas Projects such as this one are going on in many states of the U.S. and in many countries around the world. Thus our Iowa Atlas Project is part of a global effort to improve our understanding of bird distribution. We feel that participation in the Iowa Atlas Project will not only be an enjoyable field experience but will also enable birders to make a valuable contribution to scientific knowledge.

To aid atlassers in their work, we intend to create a network of Regional Coordinators to provide advice and support, training workshops for atlassers and coordinators (there will be one at the Spring IOU meeting in Indianola), and, if resources allow, a newsletter. We will provide detailed instructions and maps to all participants.

We invite all Iowa birders to help us with the Atlas. If you would like to survey the breeding birds on one or more blocks near your home, or are interested in participating in the Atlas in other ways, please fill out the form enclosed in this issue of IOWA BIRD LIFE and return it to me. We would also appreciate your calling the Atlas Project to the attention of other birders you know who may not be members of the IOU.

Michael C. Newlon, Atlas Steering Committee, 408 Wales St., Iowa City, Ia. 52240